

REMARKS/ARGUMENTS

The Examiner is thanked for the Office Action mailed September 13, 2007. The status of the application is as follows:

- Claims 1-20 are pending. Claims 1 and 4-20 have been amended.
- Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph.
- Claims 1-20 stand rejected under 35 U.S.C. 102(b) as being anticipated by Komardin (US 6,175,117 B1).

The rejections are discussed below.

The Rejection under 35 U.S.C. 112, Second Paragraph

Claims 1-10 stand rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Office Action has rejected claims 1, 8, and 10 for phrases that the Office deems as not providing a standard for ascertaining the requisite degree so that one of ordinary skill in the art would be reasonably apprised of the scope of the invention. The remaining claims stand rejected as being dependent on a rejected base claim. This rejection is moot as the phrases noted by the Office have been cancelled for other reasons from the subject claims.

The Rejection of Claims 1-20 under 35 U.S.C. 102(b)

Claims 1-20 stand rejected under 35 U.S.C. 102(b) as being anticipated by Komardin. This rejection should be withdrawn because Komardin does not teach each and every element as set forth in the subject claims and, therefore, does not anticipate claims 1-20.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

MPEP §2131.

Independent **claim 1** has been amended to incorporate the aspects of claims 8 and 9 and to include various other aspects from the specification. Claim 1 now includes, *inter alia*, a detector arrangement configured to be displaced, with respect to the radiation source, along a longitudinal axis, and a first drive unit configured to displace the detector arrangement along the longitudinal axis so that substantially all transmission radiation that traverses the examination zone bypasses the detector arrangement and scattered radiation that traverses the examination zone illuminates the detector arrangement. Komardin does not teach or suggest the above-noted claim aspects.

In contrast, Komardin teaches that the detector 28 is shifted, with respect to the radiation source, in a direction 54 perpendicular to the longitudinal axis (or along the direction of the propagation of the radiation beam) to adjust the height of the detector 28 with respect to the radiation source. (See Fig. 1 and column 7, lines 32-36). Komardin also teaches that the radiation source housing 14 and the detector 28 are shifted together in a direction 70 along a longitudinal axis. (See Fig. 1 and column 8, lines 23-36). As such, there is no relative shift between the detector 28 and the radiation source 20 as required in claim 1, and, as a result, such a shift, alone, has no bearing on whether transmission radiation illuminates or bypasses the detector 28. Claim 1 requires that the relative displacement of the detector arrangement, with respect to the radiation source, results in the transmission radiation bypassing the detector arrangement. The Office notes that Komardin discloses blocking transmission radiation from striking the detector 28 by placing a filter 26 between the transmission radiation and the detector 28. (See Fig. 1 and column 6, lines 42-49). However, amended claim 1 requires that the transmission radiation bypass the detector arrangement. Accordingly, this rejection should be withdrawn.

Amended **claim 4**, which depends from claim 1, recites that the apparatus further include a source collimator arranged with respect to the radiation source to be offset from the radiation source in a direction perpendicular to a propagation direction of the radiation beam in such a manner that the transmission radiation traversing the examination zone substantially bypasses the detector arrangement. The Office again notes that Komardin uses the filter 26 to block transmission radiation from striking the

detector 28. However, amended claim 4 requires that the relative displacement between the source collimator and the radiation source result in the transmission radiation bypassing the detector arrangement. Thus, Komardin does not teach claim 4, and this rejection should be withdrawn.

Amended **claim 5**, which depends from claim 4, recites that the source collimator is configured for displacement in the direction perpendicular to the propagation direction of the radiation beam and that the apparatus further includes a second drive unit for selectively displacing the source collimator with respect to the radiation source in such a manner that the transmission radiation traversing the examination zone substantially bypasses the detector arrangement. At column 9, lines 35-55, Komardin discloses moving a source diaphragm/collimator 24 in such a direction; however, Komardin does not contemplate moving the source collimator 24 so that transmission radiation traversing the examination zone substantially bypasses the detector 28. Rather, Komardin discloses that the source collimator 24 is moved so that the beam 30 penetrates a desired section of the breast and that radiation is received in both the transmission beam zone 38 and the scatter zone 40 of the detector 28. In light of the above, this rejection should be withdrawn.

Amended **claim 7**, which depends from claim 1 through claim 6, recites that the sub-region of the detector collimator set forth in claim 6 includes an opening through which transmission radiation traverses unattenuated and illuminates the detector arrangement. From claim 6, the sub-region attenuates the transmission radiation so that an intensity of the transmission radiation illuminating the detector arrangement is substantially equal to an intensity of the scattered radiation illuminating the detector arrangement. Column 7, lines 11-21, of Komardin discloses that the filter 26 may be entirely radiation opaque or partially radiation transmissive to reduce the intensity of the transmission radiation to level where the intensity of the detected transmission radiation is the same order as the intensity of the detected scatter radiation. Komardin does not contemplate including an opening in the filter 26 that allows transmission radiation to pass through the filter 26 unattenuated by the filter 26 as recited in the subject claim. As such, this rejection should be withdrawn.

Amended **claim 8**, which depends from claim 1, recites that the radiation source is configured for displacement along the longitudinal axis and that the apparatus further includes a source collimator and a second drive unit that displaces the radiation source with respect to the source collimator along the longitudinal axis so that the transmission radiation traversing the examination zone substantially bypasses the detector arrangement. At column 9, lines 35-55, Komardin discloses moving the source 20; however, the source 20 is moved in a direction perpendicular to the longitudinal axis, and not along the longitudinal axis as recited in claim 8. Therefore, this rejection should be withdrawn.

Claims 2 and 3 and amended **claims 6 and 9** depend from independent claim 1 and, by virtue of their dependencies, are allowable for at least the reasons discussed above.

Independent **claim 10** has been amended to incorporate the aspects of claims 6 and 7 and to include various other aspects from the specification. Claim 10 now includes, *inter alia*, a collimator arranged between the examination zone and the detector arrangement. The collimator includes a sub-region that attenuates the transmission, and the sub-region includes an opening through which transmission radiation traverses substantially attenuated and illuminates the detector arrangement. As discussed *supra* in connection with 7, Komardin discloses that the filter 26 is either entirely radiation opaque or partially radiation transmissive. Komardin does not teach or suggest including an opening in the filter 26 to allow transmission radiation to pass through the filter 26 unattenuated by the filter 26 as recited in the subject claim. Accordingly, the rejection of claim 10 should be withdrawn. Amended **claims 18-20**, which depend on claim 10, recite aspects similar to the aspects recited in claims 4, 5, and 8. As such, the discussion above regarding claims 4, 5, and 8 applies *mutatis mutandis* to claims 18-20.

Independent **claim 11** is directed towards a method that recites aspects similar to those recited in claim 1. As such, the discussion above regarding claim 1 applies *mutatis mutandis* to claim 11. Amended **claims 12-14**, which depend on claim 11, recite aspects similar to those recited in claims 1, 4, 5, and 8. As such, the discussion above regarding claims 1, 4, 5, and 8 applies *mutatis mutandis* to claims 12-14. Amended **claims 15-17**

Application No. 10/518,848
Amdt. Dated: November 28, 2007
Reply to Office Action Dated: September 13, 2007

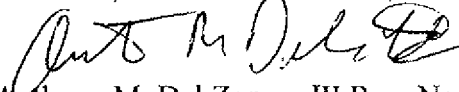
depend from independent claim 11 and are allowable at least by virtue of their dependencies.

Conclusion

In view of the foregoing, it is submitted that the claims distinguish patentably and non-obviously over the prior art of record. An early indication of allowability is earnestly solicited.

Respectfully submitted,

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